Department of Toxic Substances Control
Fact Sheet

Frequently Asked Questions Regarding Spray Polyurethane Foam (SPF) Systems Containing Unreacted Diisoscyanates

What is the Priority Product?
Any unreacted SPF Systems (including drums, kits, and cans of spray polyurethane foam materials) for insulation, filling, sealing, roofing, or other uses that contain select diisocyanates.

Why was this product chosen?
Diisocyanates are known asthmagens, capable of causing asthma or triggering severe asthma attacks in sensitive populations. They are also skin and respiratory irritants, and sensitizers. Toluene diisocyanates are reasonably anticipated to cause human cancer. Fatal exposures to diisocynates have been documented.

Who is potentially at risk from using this product?
The vast majority of workers who use SPF systems for insulation, roofing and sealing are potentially at risk. Do-It-Yourselfers (DIYers) who use this product for insulation or as a sealant are likely unaware of the risks of these products and may potentially be exposed to diisocyanates, along with their families.

What are the major routes of exposure?
The major routes of exposure are inhalation of the vapor and aerosols and skin contact during handling and clean up.

Are there alternatives?
These products can be used for a variety of purposes, and alternatives are available. For home insulation, alternatives include blown-in fiberglass, cellulose, polystyrene, and fiberglass batts. For sealing cracks, there are other possible alternatives such as caulk.

What other names is the chemical known by?
Diisocyanates, sometimes called isocyanates, are a class of low-molecular-weight aromatic and aliphatic compounds. The most common diisocyantes in SPF systems include methylene bisphenyl isocyanates (MDI) and hexamethylene diisocyanates (HDI). Some SPF systems on the market today are hybrid systems (i.e., SPF materials containing polyurethane-based coatings, sealants, or adhesives) and are likely to contain toluene diisocyantes (TDI).

What other government entity regulates this product?
Products with diisocyanates can have adverse impacts throughout their life cycle: on people, sensitive populations and the environment. Various regulatory programs address one or more of these impacts – air or water impacts or occupational exposures, for example - but *not all of the impacts or exposures.* DTSC's Safer Consumer Products Program addresses impacts from a product *throughout its entire life cycle*. For diisocyanates, the Division of Occupational Safety and Health or Cal/ OSHA requires engineering controls and has established air exposure limits.

What are the symptoms of exposure?
The symptoms include persistent or recurring eye irritation, nasal congestion, dry or sore throat, cold-like symptoms, cough, shortness of breath, wheezing, or chest tightness.

How do I reduce exposure risk if I continue to use the product?
You can reduce exposure through proper exhaust and ventilation and restricting areas with diisocyanates to only essential workers. Workers should wear protective clothing with full-face respirators**.**

Should I dispose of the product? How can I properly dispose of it?
Consult with your local Household Hazardous Waste facility or solid waste management company.